The Fiscal Effect of Private-School Vouchers

Background

In 16 states and Washington, D.C., students who have special needs, are assigned to underperforming public schools, or come from low-income families receive a voucher—which acts as a coupon—to cover part or all of the cost of attending a private school. The students’ parents select the most appropriate school for their child from participating private schools. While the primary purpose of a voucher program is to empower parents to choose a school that best serves the unique gifts and challenges of their children, there is also a fiscal benefit for the state and/or local government. It is this benefit of private-school voucher programs that is the focus of this paper.

Public education in America is one of the only major government-funded programs that does not allow participants to choose a provider. Social Security beneficiaries can choose how they spend their benefits. Medicare and Medicaid recipients generally choose their health care providers. Supplemental Nutritional Assistance Program (SNAP) recipients can choose where they shop. Federal Housing Choice Voucher program recipients can choose where they live, and in fact, the federal government touts the accommodating aspect of housing choice: “Since housing assistance is provided on behalf of the family or individual, participants are able to find their own housing, including single-family homes, townhouses and apartments.” Thus, adding choice in education is consistent with the tradition of other large government-funded programs.

Proponents of education choice argue that private-school vouchers benefit students by creating an opportunity to receive a better educational experience, increasing the likelihood of graduation and having a more lucrative and rewarding career. Opponents of education choice generally voice two concerns: (1) that private-school vouchers harm students, and (2) that financial resources are diverted away from cash-strapped public schools. Neither of the opponents’ claims are supported by research.

The majority of studies conclude that students benefit from school choice and from private-school vouchers, dispelling the opponents’ first concern. Some of those benefits include: higher academic outcomes of choice participants, higher academic outcomes of public schools through competition, lower school racial segregation, and greater student civic values and practices. Additionally, research conducted on two private-school voucher programs—the Washington, D.C. Opportunity Scholarship Program (OSP) and Milwaukee Parental Choice Program—show an increase in graduation rates for program participants. With 2014-15 public-school overall

1 Voucher program states: AR, CO, FL, GA, IN, LA, MD, ME, MS, NC, NH, OH, OK, UT, VT, WI.
graduation rates ranging from 69 percent in New Mexico to 91 percent in Iowa, and graduation
rates of black students from 56 percent in Nevada to 85 percent in Texas, improvement is a
welcome outcome and a clear benefit.\(^5\) High-school dropouts are a cost to taxpayers due to their
greater reliance on welfare, Medicaid, and Medicare, and higher rates of criminal activity.
Additionally, they earn less, are less likely to be in the labor force, and are more likely to be
unemployed.\(^6\) The positive results of school-voucher research are also reinforced by a parental
satisfaction survey of the D.C. OSP,\(^7\) and Indiana’s state voucher program.\(^8\)

Some argue that the existence of some bad private schools is evidence of program failure and
a sufficient justification to eliminate existing voucher programs and prevent their expansion.
While all schools need to be held to a high standard and must be held accountable, this standard
is inconsistent with other government programs. For example, doctors, hospitals, pharmacies,
and nursing homes that provide poor health care and/or file fraudulent claims have not led to a
widespread call to end Medicare or Medicaid.

Opponents’ second concern that financial resources are diverted from public schools is also not
supported by research. Contrary to the concern of private-school voucher opponents, research
reveals that school choice—specifically private-school vouchers—actually lowers education
costs and has a positive fiscal effect on public schools and taxpayers.

**Fiscal Effect of Voucher Programs**

If a growing student population increases public education costs, then a shrinking student
population must decrease education costs. In the short run, more public-school students cause
increased expenditures for teachers and textbooks, as well as supplies and equipment for
classrooms, art, music, and athletics. Continued enrollment growth fills schools to capacity,
which requires the addition of classroom trailers as a temporary solution to space shortages; the
long-run permanent solution is new public-school construction. Similarly, a reduction in
enrollment growth slows cost growth; and, a decreasing student body lowers public-school
demand, reducing education costs. Through the provision of private-school vouchers,
governments can slow the growth of—or in some cases reduce—public-school enrollment,
saving taxpayer dollars while offering parents education options for their children.

Private-school vouchers affect government budgets through two channels: (1) additional direct
voucher expenditures, and (2) public-school cost savings from lower enrollments. For example,
1,000 vouchers worth $7,000 each incur annual direct voucher costs of $7 million. Assuming
average public-school education cost per pupil of $12,000, and all voucher students would
otherwise attend public schools, 1,000 vouchers results in $12 million in savings. The net fiscal
effect on a state’s budget equals the reduced-enrollment savings less direct voucher cost
(Equation 1). This hypothetical public-school system would have budget savings of $5 million
dollars annually for every 1,000 vouchers (Equation 2).\(^9\)

\[
(1) \quad \text{Fiscal Effect} = \text{Enrollment Savings} - \text{Voucher Costs}
\]

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\(^7\) “Customer Satisfaction and Educational Outcomes: Experimental Impacts of the Market-Based Delivery of Public

\(^8\) “Why Indiana Parents Choose: A Cross-Sector Survey of Parents’ Views in a Robust School Choice Environment,” EdChoice,

\(^9\) Voucher amount and public school education cost per student are the rounded average of the nine voucher programs
presented in Table 1.
However, some vouchers might represent an added state-government expense with no enrollment savings. That is, a portion of private-school voucher recipients may not be diverted from public schools because they would attend a private school with or without a voucher. Consequently, a voucher simply allows a private-school student’s family to pass the school’s cost to the state. Some programs assure a 100 percent public-school transfer rate by requiring all voucher applicants be enrolled in public school.\textsuperscript{10} Assuming no such eligibility requirement and only 90 percent of vouchers go to families to transfer their child out of public school to a private school, enrollment savings and fiscal effect are recalculated to $10.8 million and $3.8 million, respectively (Equations 3-5).

\begin{align*}
\text{Enrollment Savings} &= \text{Public School Portion} \times \text{No. of Vouchers} \times \text{Voucher Amount} \\
\text{Enrollment Savings} &= 90\% \times 1,000 \text{ vouchers} \times $12,000 = $10.8 \text{M} \\
\text{Fiscal Effect} &= $10.8\text{M} - $7.0\text{M} = $3.8\text{M}
\end{align*}

It is also worth noting that enrollment savings do not necessarily represent a reduction in taxpayer monies directed to schools; often school funding remains relatively stable as enrollments and costs fluctuate. However, whether or not the state and the school district choose to adjust school funding as enrollment fluctuates is irrelevant in terms of the existence of, or calculating the magnitude of, the savings; fewer public-school students means lower costs. Falling enrollments and stable school funding actually increases per-pupil spending as the enrollment savings are “passively reinvested” back into the public school.\textsuperscript{11}

Milwaukee’s Parental Choice Program is America’s oldest voucher program. Its twenty-year cumulative savings (1990-91 through 2010-11) exceeds $238 million. The states with the highest savings through the 2010-11 school year were Florida and Ohio, with cumulative savings of $839 and $537 million, respectively. Aggregate cumulative school voucher savings for ten programs through 2010-11 exceed $1.7 billion,\textsuperscript{12} and estimated savings through 2015 are $3 billion—$3,800 per voucher.\textsuperscript{13}

\textbf{Conditions for Cost Savings}

For a positive fiscal effect—meaning net budget savings—two conditions must hold: (1) the average voucher expense must be less than the per-pupil public-school education cost ($V < C$); and (2) the portion of students using vouchers to leave public schools must be sufficiently high to generate savings to offset the voucher costs ($V/C < R$). Rewriting equation 1 using Box 1 variables results in equation 6; equation 7 states the required voucher

\begin{center}
\begin{tabular}{|c|c|}
\hline
\textbf{Variable} & \textbf{Definitions} \\
\hline
$N$ & Number of vouchers in use \\
$C$ & Average public education cost per pupil \\
$R$ & Portion of voucher users transferring from public school \\
$V$ & Average voucher expense \\
\hline
\end{tabular}
\end{center}

\textsuperscript{10} Florida’s McKay Scholarship program is an example of a public-school enrollment requirement. http://www.fldoe.org/schools/school-choice/k-12-scholarship-programs/mckay/eligibility-requirements.shtml


\textsuperscript{12} ibid, p. 2.

\textsuperscript{13} EdChoice savings estimate through 2015, as of August 2017. Savings estimates are ongoing and a savings report through 2015 with final numbers is expected to be issued early in 2018.
amount to assure a positive fiscal effect. This private-school voucher framework illustrates the fiscal effect and necessary conditions for net budget savings.\textsuperscript{14}

\begin{equation}
Fiscal\ Effect = (R \times N \times C) - (V \times N) = N(RC - V)
\end{equation}

\begin{equation}
Budgetary\ Savings\ Condition: V < RC
\end{equation}

Variables $N$, $V$, and $R$ are self-explanatory. Public education cost per pupil ($C$) requires further explanation.

In the short-run, some education costs are fixed costs and others are variable. Short-run fixed costs are those that do not vary with enrollment change. Public-school short-run fixed costs include: capital expenditures, debt interest, general administration, school administration, operation and maintenance, transportation, and “other” support. Short-run variable costs change with student population and include: instruction, student support, instructional staff support, enterprise operations, and food (Appendix contains cost definitions). In order to accurately isolate the enrollment savings, only short-run variable costs apply. Thus, ($C$) represents only the short-run variable cost portion of total short-run per-pupil cost.\textsuperscript{15}

Using existing voucher-program data, a state wishing to design a similar program can estimate the fiscal effect. Table 1 contains the average voucher expense ($V$), short-run variable cost ($C$), voucher-cost ratio ($V/C$), and the portion of voucher users transferring out of public schools ($R$) for nine programs in 2011. For all programs, the necessary conditions for budget savings exist—all vouchers are less than the variable cost ($V < C$), and enough students transferred out of public school to generate savings in excess of the voucher cost ($V/C < R$). The average voucher-cost ratio ($V/C$) is 54 percent, ranging from 30 – 68 percent; and an average 91 percent of voucher students transferred out of public schools ($R$), ranging from 61 – 100 percent.

<table>
<thead>
<tr>
<th>Table 1: School Voucher Programs 2011</th>
<th>$V$</th>
<th>$C$</th>
<th>$V/C$</th>
<th>$R$</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.C. - Opportunity Scholarship Program</td>
<td>$7,500$</td>
<td>$12,324$</td>
<td>61%</td>
<td>88%</td>
</tr>
<tr>
<td>FL - John M. McKay Scholarships for Students with Disabilities Program</td>
<td>$6,693$</td>
<td>$12,776$</td>
<td>52%</td>
<td>100%</td>
</tr>
<tr>
<td>GA - Georgia Special Needs Scholarship Program</td>
<td>$6,860$</td>
<td>$13,292$</td>
<td>52%</td>
<td>100%</td>
</tr>
<tr>
<td>LA - Student Scholarships for Educational Excellence Program</td>
<td>$4,593$</td>
<td>$7,739$</td>
<td>59%</td>
<td>100%</td>
</tr>
<tr>
<td>OH - Cleveland Scholarship Program</td>
<td>$3,103$</td>
<td>$10,343$</td>
<td>30%</td>
<td>80%</td>
</tr>
<tr>
<td>OH - Autism Scholarship Program</td>
<td>$15,853$</td>
<td>$23,328$</td>
<td>68%</td>
<td>100%</td>
</tr>
<tr>
<td>OH - Educational Choice Scholarship Program</td>
<td>$3,855$</td>
<td>$7,776$</td>
<td>50%</td>
<td>100%</td>
</tr>
<tr>
<td>UT - Carson Smith Special Needs Scholarship Program</td>
<td>$4,893$</td>
<td>$8,878$</td>
<td>55%</td>
<td>61%</td>
</tr>
<tr>
<td>WI - Milwaukee Parental Choice Program</td>
<td>$6,442$</td>
<td>$10,150$</td>
<td>63%</td>
<td>90%</td>
</tr>
<tr>
<td>Average</td>
<td>$6,644$</td>
<td>$11,845$</td>
<td>54%</td>
<td>91%</td>
</tr>
</tbody>
</table>


**New Jersey**

The Mercatus Center recently ranked New Jersey as the state with the worst fiscal condition, and out of 34 states that could benefit from implementing a voucher system where none exists,


New Jersey could fiscally benefit the most from vouchers. The state could create educational options for thousands of children, simultaneously reaping much-needed budgetary relief through vouchers.

New Jersey’s 2017 estimated short-run variable cost \( (C_{NJ}) \) per student is $12,143 and comprises the cost of the state average of total classroom instruction, total support services, and extracurricular expenses. Multiplying the average voucher-cost ratio \( (V/C) \) from Table 1 and the state’s 2017 short-run variable cost \( (C_{NJ}) \) generates one possible voucher amount for New Jersey \( (V_{NJ}) \). Using equation 6 and Box 2 variables, three scenarios are generated.

New Jersey could design a voucher program to benefit students from low-income families, students in underperforming schools, and/or special needs students that generates savings for the state. Figure 1 illustrates the fiscal savings using the low, average, and high public-school transfer rates from Table 1. Applying the average voucher-cost ratio (54 percent) and average public-school transfers (91 percent) from existing programs results in taxpayer savings of $4.5 million for every 1,000 vouchers.

The Ohio Educational Choice Scholarship Program (ECSP) is the largest of five Ohio voucher programs with over 20,000 of the 47,000 total Ohio voucher students participating annually. If New Jersey followed Ohio’s ECSP model by granting 20,000 vouchers, it would save nearly $90 million per year in the short run; over the long run savings would be even greater. These savings could be redirected to other programs or reinvested back into the public-school system.

It is important to recognize that there are substantial regional variations in public education cost per pupil and private-school tuition rates, both from one state to another and in different regions within a state. The example presented is based on New Jersey’s statewide average education cost per pupil and nine existing voucher programs; New Jersey would need to tailor its program, which may include a wide range of voucher amounts, to best serve its residents across the state. However, so long as the equation 7 condition is met, New Jersey students and taxpayers stand to benefit from implementing a private-school voucher program.

**Conclusion**

Some parents of students with special needs, who are enrolled in underperforming public schools, or who are in low-income families are dissatisfied with their children’s education. When given the opportunity to access a private school through the use of a voucher, many parents and students choose to leave their government-assigned school.

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Higher graduation rates along with parent and student satisfaction are sufficient reasons to maintain and expand private-school vouchers. Furthermore, as states face tighter budgets, the fiscal relief from vouchers also makes them an important budget-stabilizing tool.

Appendix:

Definitions of Cost Categories in the Common Core of Data (CCD)

**Instruction.** The sum of all instructional expenditures except property expenditures. Instruction expenditures are for services and materials directly related to classroom instruction and the interaction between teachers and students. Teacher salaries and benefits, textbooks, classroom supplies and extracurricular activities are included in instruction. Expenditures for the library and in-service teacher training are reported as instruction support services. Guidance counselors and nurses are reported under student support services.

**Capital Expenditures.** Construction spending includes expenditures for the construction of fixed assets.

**Enterprise Operations.** Enterprise operations spending includes expenditures for business-like activities such as a bookstore, where the costs are recouped largely with user charges.

**General Administration.** This is the sum of all expenditures for school district administration, including boards of education and their staff and executive administration. Also included are expenditures for legal activities in interpretation of laws and statutes, and general liability situations.

**Food Service.** This is the sum for all expenditures associated with providing food services excluding property expenditures.

**Interest.** Interest on debt payments include all expenditures for interest incurred on both long-term and short-term indebtedness of the school system, excluding principal payments.

**School Administration.** This is the sum of all support services expenditures for school administration excluding property expenditures.

**Transportation.** This is the sum of all support services expenditures for student transportation excluding property expenditures.

**Student Support Services.** This is the sum of all support services expenditures for students excluding property expenditures.

**Other Support Services.** Expenditures for dues and fees for membership by instructional staff in professional and other organizations. Miscellaneous expenditures for goods and services are also included.

**Instruction Staff Support.** Expenditures for benefits to supervisors of instruction (not department chairs), library and media center staff, computer lab staff, curriculum coordinators, and in-service teacher training staff. Benefits are expenditures made in addition to gross salary and not paid directly to employees. They include amounts paid on behalf of a Local Education Agency for fringe benefits such as group insurance, social security contributions, retirement contributions, tuition reimbursements, unemployment compensation, workers' compensation, and other employee benefits.

**Operations & Maintenance.** This is the sum of all support services expenditures for operations and maintenance excluding property expenditures.